

# Claims

- [c1] A golf club head comprising:
- a heel;
  - a toe;
  - a top portion;
  - a sole portion;
  - a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;
  - a rear face opposite the striking face, the rear face defining a first rear cavity;
  - a bridge member extending across the first rear cavity;
  - and
  - a wall extending from the sole portion to the bridge member, the wall forming a second rear cavity, the second rear cavity and the bridge member varying a center of gravity of the golf club head with respect to the striking face.
- [c2] The golf club head of claim 1, wherein the golf club head further comprises a space between the wall and the rear face.
- [c3] The golf club head of claim 1, wherein the second rear

cavity is located between the bridge member and the sole portion.

- [c4] The golf club head of claim 3, wherein the second rear cavity includes an epoxy to vary the position of a center of gravity of the golf club head with respect to the striking face.
- [c5] The golf club head of claim 3, wherein the second rear cavity includes a high density material to vary the position of a center of gravity of the golf club head with respect to the striking face.
- [c6] The golf club head of claim 5, wherein the high density material comprises tungsten.
- [c7] The golf club head of claim 1, wherein the second rear cavity comprises a vibration damping material.
- [c8] The golf club head of claim 1, wherein the wall comprises a plastic.
- [c9] The golf club head of claim 1, wherein the wall comprises a front surface, a back surface opposite the front surface, a top surface, and a bottom surface, the bottom surface opposite the top surface.
- [c10] The golf club head of claim 9, wherein the front surface is secured to the bridge member using an adhesive.

- [c11] The golf club head of claim 1, wherein the wall is integrally formed with the sole portion.
- [c12] A golf club head comprising:
- a heel;
  - a toe;
  - a top portion;
  - a sole portion;
  - a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;
  - a rear face opposite the striking face, the rear face defining a first rear cavity;
  - a bridge member extending across the first rear cavity;
  - and
  - a wall extending from the top portion to the bridge member, the wall forming a second rear cavity, the second rear cavity and the bridge member varying a center of gravity of the golf club head with respect to the striking face.
- [c13] The golf club head of claim 12, wherein the golf club head further comprises a space between the rear face and the wall.
- [c14] The golf club head of claim 12, wherein the second rear

cavity is located between the bridge member and the top portion.

[c15] The golf club head of claim 14, wherein the second rear cavity includes an epoxy to vary the position of a center of gravity of the golf club head with respect to the striking face.

[c16] The golf club head of claim 14, wherein the second rear cavity includes a high density material to vary the position of a center of gravity of the golf club head with respect to the striking face.

[c17] The golf club head of claim 16, wherein the high density material comprises tungsten.

[c18] The golf club head of claim 12, wherein the wall comprises a plastic.

[c19] The golf club head of claim 12, wherein the wall comprises a front surface, a back surface opposite the front surface, a top surface, and a bottom surface, the bottom surface opposite the top surface.

[c20] The golf club head of claim 19, wherein the front surface is secured to the bridge member using an adhesive.

[c21] The golf club head of claim 12, wherein the wall is integrally formed with the top portion.

- [c22] A long iron cavity back golf club head, the long iron cavity golf club head comprising:
- a body, the body having a toe, a heel, a top portion, a sole portion, a striking face, a rear face opposite the striking face;
  - a first rear cavity;
  - a single bridge member extending across the first rear cavity; and
  - a second rear cavity, the second rear cavity defined by a wall, the wall connecting the bridge member to the sole portion of the long iron cavity back golf club head, the second rear cavity and the single bridge member varying a center of gravity of the long iron cavity back golf club head with respect to the striking face.
- [c23] The long iron cavity back golf club head of claim 22, wherein the long iron cavity back golf club head comprises a two iron.
- [c24] The long iron cavity back golf club head of claim 22, wherein the long iron cavity back golf club head comprises a three iron.
- [c25] The long iron cavity back golf club head of claim 22, wherein the long iron cavity back golf club head comprises a four iron.

- [c26] The long iron cavity back golf club head of claim 22, wherein the long iron cavity back golf club head comprises a five iron.
- [c27] The long iron cavity back golf club head of claim 22, wherein the second rear cavity includes an epoxy to vary the position of a center of gravity of the long iron cavity back golf club head with respect to the striking face.
- [c28] The long iron cavity back golf club head of claim 22, wherein the second rear cavity includes a high density material to vary the position of a center of gravity of the long iron cavity back golf club head with respect to the striking face.
- [c29] The long iron cavity back golf club head of claim 28, wherein the high density material comprises tungsten.
- [c30] The long iron cavity back golf club head of claim 22, wherein the wall comprises a plastic.
- [c31] The long iron cavity back golf club head of claim 22, wherein the wall comprises a front surface, a back surface opposite the front surface, a top surface, and a bottom surface, the bottom surface opposite the top surface.
- [c32] The long iron cavity back golf club head of claim 31,

wherein the front surface is secured to the bridge member using an adhesive.

[c33] The long iron cavity back golf club head of claim 22, wherein the wall is integrally formed with the sole portion.

[c34] The long iron cavity back golf club head of claim 22, wherein the wall connecting the bridge member to the sole portion comprises a curve.

[c35] A short iron cavity back golf club head, the short iron cavity back golf club head comprising:  
a body having a toe, a heel, a top portion, a sole portion, a striking face, a rear face opposite the striking face;  
a single bridge member extending across a first rear cavity; and  
a second rear cavity, the second rear cavity defined by a wall, the wall connecting the bridge member to the top portion of the short iron cavity back golf club head, the second rear cavity and the single bridge member varying a center of gravity of the short iron cavity back golf club head with respect to the striking face.

[c36] The short iron cavity back golf club head of claim 35, wherein the short iron cavity back golf club head comprises a six iron.

- [c37] The short iron cavity back golf club head of claim 35, wherein the short iron cavity back golf club head comprises a seven iron.
- [c38] The short iron cavity back golf club head of claim 35, wherein the short iron cavity back golf club head comprises an eight iron.
- [c39] The short iron cavity back golf club head of claim 35, wherein the short iron cavity back golf club head comprises a nine iron.
- [c40] The short iron cavity back golf club head of claim 35, wherein the short iron cavity back golf club head comprises a pitching wedge.
- [c41] The short iron cavity back golf club head of claim 35, wherein the second rear cavity includes an epoxy to vary the position of a center of gravity of the short long iron cavity back golf club head with respect to the striking face.
- [c42] The short iron cavity back golf club head of claim 35, wherein the second rear cavity includes a high density material to vary the position of a center of gravity of the short iron cavity back golf club head with respect to the striking face.



- [c43] The short iron cavity back golf club head of claim 42, wherein the high density material comprises tungsten.
- [c44] The short iron cavity back golf club head of claim 35, wherein the wall comprises a plastic.
- [c45] The short iron cavity back golf club head of claim 35, wherein the wall comprises a front surface, a back surface opposite the front surface, a top surface, and a bottom surface, the bottom surface opposite the top surface.
- [c46] The short iron cavity back golf club head of claim 45, wherein the front surface is secured to the bridge member using an adhesive.
- [c47] The short iron cavity back golf club head of claim 35, wherein the wall is integrally formed with the top portion.
- [c48] The short iron cavity back golf club head of claim 35, wherein the wall connecting the bridge member to the top portion comprises a curve.
- [c49] A set of iron golf clubs, the set of iron golf clubs comprising:
  - a plurality of increasing numbered iron golf clubs, the plurality of increasing numbered iron club clubs each

having a shaft and a golf club head; the golf club head positioned on an end of the shaft, the golf club head of each iron golf club comprising:

- a striking face that provides a contact area for engaging a golf ball;

- a first rear cavity positioned opposite the striking face;

- a single bridge member extending across the first rear cavity; and

- a second rear cavity, the second rear cavity defined by a wall, the wall connecting the bridge member to the golf club head, the second rear cavity and the single bridge member varying a center of gravity of the golf club heads with respect to the striking face.

[c50] A golf club head comprising:

- a heel;

- a toe;

- a top portion;

- a sole portion;

- a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;

- a rear face opposite the striking face, the rear face defining a first rear cavity;

- a bridge member extending across the first rear cavity, the bridge member connecting the heel and the toe; and

a wall extending from the sole portion to the bridge member, the wall spaced apart from the rear face, the wall forming a second rear cavity, the second rear cavity and the bridge member varying a center of gravity of the golf club head with respect to the striking face.

[c51] A golf club head comprising:  
a heel;  
a toe;  
a top portion;  
a sole portion;  
a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;  
a rear face opposite the striking face, the rear face defining a first rear cavity; a bridge member extending across the first rear cavity, the bridge member connecting the heel and the toe; and  
a wall extending from the top portion to the bridge member, the wall spaced apart from the rear face, the wall forming a second rear cavity, the second rear cavity and the bridge member varying a center of gravity of the golf club head with respect to the striking face.

[c52] The golf club head of claim 1, wherein the bridge member connects the toe and the heel.

- [c53] The golf club head of claim 12, wherein the bridge member connects the toe and the heel.
- [c54] The long iron cavity back golf club head of claim 22, wherein the single bridge member connects the toe and the heel.
- [c55] The short iron cavity back golf club head of claim 35, wherein the single bridge member connects the toe and the heel.
- [c56] A golf club head comprising:  
a heel;  
a toe;  
a top portion;  
a sole portion;  
a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;  
a rear face opposite the striking face, the rear face defining a first rear cavity;  
a bridge member extending across the first rear cavity, the bridge member connecting the heel and the toe, and the bridge member having a first height dimension in an area adjacent the heel, a second height dimension adjacent the toe, and a third height dimension between the heel and the toe, the third height dimension being less

than the first height dimension and the second height dimension; and  
a wall extending from one of the top portion and the sole portion to the bridge member, the wall spaced apart from the rear face.

[c57] A golf club head comprising:  
a heel;  
a toe;  
a top portion;  
a sole portion;  
a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;  
a rear face opposite the striking face, the rear face defining a first rear cavity;  
a bridge member extending across the first rear cavity, the bridge member connecting the heel and the toe, and the bridge member having a curved upper edge and a curved lower edge such that height dimensions of end portions of the bridge member are greater than a height dimension of a central portion of the bridge member;  
and  
a wall extending from one of the top portion and the sole portion to the bridge member, the wall spaced apart from the rear face, the wall forming a second rear cavity.

[c58] A golf club head comprising:

- a heel;
- a toe;
- a top portion;
- a sole portion;
- a striking face extending from the top portion to the sole portion, the striking face providing a contact area for engaging a golf ball;
- a rear face opposite the striking face, the rear face defining a first rear cavity;
- a bridge member extending across the first rear cavity, the bridge member connecting the heel and the toe, and the bridge member having a curved upper edge and a curved lower edge such that height dimensions of end portions of the bridge member are greater than a height dimension of a central portion of the bridge member, and the bridge member curving outward from the first rear cavity; and
- a wall extending from one of the top portion and the sole portion to the bridge member, the wall being formed of unitary construction with at least one of the bridge member and a remainder of the golf club head, the wall being spaced apart from the rear face, and the wall forming a second rear cavity.

[c59] The golf club head of claim 58, wherein the bridge member is formed of unitary construction with the heel and the toe.